AMENDMENTS TO THE CLAIMS

- 1. (Currently Amended) A memory cell in an array of memory cells, a memory cell comprising:
 - a silicon substrate;
- a floating gate formed at least in part within said <u>silicon</u> substrate; and
- a bit line region formed enclosed within and surrounded by said silicon substrate in proximity to said floating gate.
 - 2. (Canceled).
- 3. (Original) The memory cell of Claim 1 wherein said bit line is formed in proximity to two adjacent surfaces of said floating gate.
- 4. (Original) The memory cell of Claim 3 wherein said bit line region is located below said floating gate and along one side of said floating gate.
 - 5. (Original) The memory cell of Claim 1 further comprising: a dielectric layer disposed over said floating gate; and a control gate disposed over said oxide layer.
- 6. (Currently Amended) The memory cell of Claim 5 wherein said substrate comprises silicon, said floating gate and said control gate comprise polysilicon, said bit line region comprises arsenic, and said dielectric layer comprises oxide-nitride-oxide.

AMD-H0563/JPH/WAZ Examiner: WOJCIECHOWICZ, E. Serial No.: 10/738,322 Group Art Unit: 2815 7. (Currently Amended) The memory cell of Claim 1 further comprising:

a tunnel oxide layer formed between said <u>silicon</u> substrate and said floating gate.

Claims 8-14. (Canceled).

15. (Currently Amended) A flash memory array comprising:
a plurality of floating gates arrayed in rows and columns, said floating
gates formed at least in part within a substrate;

a control gate coupling floating gates and functioning as a word line; and

a plurality of bit lines, each bit line of said plurality of bit lines that is essentially perpendicular to said word line, said each bit line buried within said substrate, said each bit line in cross-section having a first portion and a second portion that is essentially at a right angle to said first portion, wherein a first portion of a first bit line is essentially parallel to a first portion of a second bit line, wherein said first portion of said first bit line and said first portion of said second bit line lie in different planes, and wherein further a second portion of said first line and a second portion of said second bit line lie in essentially the same plane.

16. (Currently Amended) The flash memory array of Claim 15 wherein said <u>each</u> bit line is formed in proximity to two adjacent surfaces of said floating gates.

AMD-H0563/JPH/WAZ Examiner: WOJCIECHOWICZ, E. 17. (Currently Amended) The flash memory array of Claim 16 wherein said <u>each</u> bit line is located below and along one side of <u>a respective</u>

said floating gate.

18. (Original) The flash memory array of Claim 15 further

comprising:

a dielectric layer formed between said control gate and said floating

gates.

19. (Original) The flash memory array of Claim 18 wherein said

oxide layer and said control gate are formed such that they separate adjacent

floating gates along said word line.

20. (Original) The flash memory array of Claim 18 wherein said

substrate comprises silicon, said floating gates and said control gate comprise

polysilicon, said bit lines comprise arsenic, and said dielectric layer comprises

oxide-nitride-oxide.

21. (Original) The flash memory array of Claim 15 further

comprising:

a tunnel oxide layer formed between said substrate and said floating

gates.

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